

# Klipsch Synergy Series



KSB 1.1

KSB 2.1

KSB 3.1

KSC-CI

KSB-SI

## **Owner's Manual & Warranty**

## **Dear Klipsch Synergy Series Owner:**

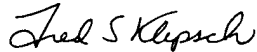
Congratulations on your purchase of Klipsch Synergy Series loudspeakers! These products represent the best in new thinking, coupled with the Klipsch tradition of sonic excellence.

The Synergy Series was developed using the latest in materials and technology to deliver extraordinary sound from today's demanding digital sources. Designed as a family, the Klipsch Synergy Series was developed to provide optimal performance as a home theater system. To complement the front main speakers, Klipsch engineers have developed the voice-matched KSC-C1™ center channel and KSB-S1™ rear surround speakers. All Synergy models offer the accuracy, dramatic imaging and high sensitivity that characterize the "live" Klipsch sound. By utilizing our new Tractrix® Horn technology, the Synergy models offer the type of high quality performance normally found only in professional speakers, ensuring you a truly enjoyable listening experience.

Please take the time to fill out the enclosed questionnaire and warranty registration card. This information helps us serve you better and assists our dealers in meeting your needs as a valued Klipsch customer. Should you have any questions or need more information on Synergy or other Klipsch products, please contact us. We will be happy to assist you, and we welcome your feedback.

Thank you for choosing Klipsch loudspeakers.

Sincerely,



Fred S. Klipsch  
Chairman & CEO

### **We Want Your Klipsch Product to Look and Sound as Good as When it Left the Factory. Please Check Promptly for Transit Damage.**

Each Klipsch product is individually tested for sonic quality and inspected for superior appearance before it leaves the Hope, Arkansas factory. Your loudspeaker left the factory in perfect condition in packaging carefully engineered to protect both the working parts and finish. However, in certain extreme circumstances, the products may be damaged in transit.

To ensure that your loudspeaker is in its original condition, please inspect it immediately. If any damage is discovered, notify the transportation company responsible for safe delivery. Make a request for inspection and hold the product in its original shipping carton for the inspector. After a joint inspection report is made, file a claim with the transportation company.

### Surface Placement

Included with your KSB 1.1 loudspeakers are two pairs of rubber hemispheric adhesive “feet” (large and small) to level the speaker and provide a non skid surface to protect your furniture from scratches. Refer to figure B for proper installation of feet.

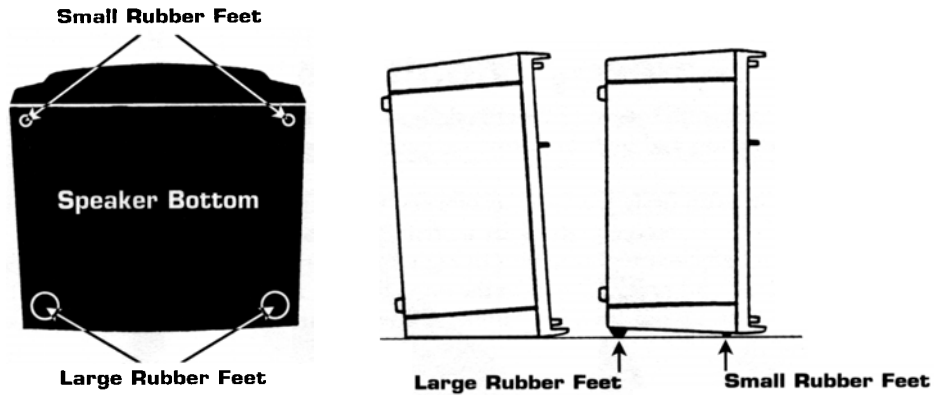


Figure B



### HOW TO CONNECT THE KSB SERIES MONITORS

Switch your electronics OFF when making all connections! Connect your KSB monitors to the “Front” or “Main,” left and right channels of your system’s power amplifier. Be sure to observe proper polarity (+ to + and - to -) and avoid having excess bare wire at the connectors, which could short together causing possible amplifier damage. Refer to “About Speaker Wire Connections.”

## Klipsch Synergy KSC-C1 Center Channel

The Synergy KSC-C1 is optimized for use as a center channel. As such, it uses full magnetic shielding in all of its drivers to minimize picture discoloration and distortion from stray magnetic fields.

### PLACEMENT OF THE CENTER CHANNEL

The center channel should be on or as close to your video screen as possible. Its function is to create the appearance that sound is coming directly from the central area of the screen, such as in dialogue in a motion picture soundtrack.

Inverting the speaker so that it rests on the angled top portion of its cabinet will direct the sound upward to compensate for a low placement height. A typical example would be placing the speaker on a low shelf under a direct view television. The grille may then be installed in an inverted position so the Klipsch logo is properly oriented.

For use on top of a television set or shelf, use the self-stick rubber feet included in the package. These feet will protect your furniture or television and provide a non-skid surface for the speaker.



### HOW TO CONNECT THE KSC-C1 CENTER CHANNEL

Switch your electronics OFF when making all connections! To use a center channel speaker, your receiver, or signal processor, must have a designated center channel output. Connect your KSC-C1 to the “Center Channel” output terminals of your system’s power amplifier. Be sure to observe proper polarity (+ to + and - to -) and avoid having excess bare wire at the connectors, which could short together causing possible amplifier damage. Refer to “About Speaker Wire Connections.”

## Klipsch Synergy KSB-S1 Surround Speakers

The Synergy KSB-S1 speakers are intended for use as rear channel surround sound speakers in home theater or multi-channel audio/video applications. They are NOT intended for use as main or front speakers (left, center or right).

Surround speakers work in combination with other speakers adding dynamic realism and special effects impact by virtue of their high efficiency and wide dispersion pattern. The KSP-S1 has a high

95 dB sensitivity level (equivalent sound energy), resulting in realistic sound levels for surround channel applications. A 3 dB increase in sensitivity is equivalent to **doubling** the wattage of your power amplifier!

The KSB-S1 features Klipsch's exclusive Wide-Dispersion Surround Technology™. This technology utilizes two drivers aligned at 90° to one another to create an optimal 180° soundfield. The resulting wide and evenly dispersed soundfield is perfectly suited for rear channel surround applications. This unique Klipsch approach is ideal for the latest multi-channel (Dolby Digital® and DTS®) soundtracks on DVD and laser disc formats, making Klipsch truly "Digital Ready."

#### **PLACEMENT OF THE KSB-S1 SURROUND SPEAKERS**

One of the principle advantages of Klipsch's unique Wide-Dispersion Surround Technology is greater placement flexibility. Due to the full 180° coverage pattern, you can place the KSB-S1s on the rear wall, side walls or even on the ceiling. The most common placement is on the side walls, adjacent to the listening/viewing area, or on the rear wall facing the front of the room. When placed at the rear of the room, leave at least one foot of clearance from the side walls. A height of approximately five to seven feet from the floor to the base of the cabinet is recommended.

An alternative placement would be on the ceiling, either directly above or several feet behind the listening area. The long dimension of the cabinet should be oriented with the front and rear of the room, or with the side walls to compensate for room shape and layout. Optimal surround speaker placement is highly dependent upon individual room layout and the resulting acoustics. Experiment with speaker placement until you achieve a desirable balance of envelopment and directional cues. Consult your Klipsch dealer for more specific guidance on placement to suit your particular home theater room.

#### **Wall Mounting**

Mounting your KSB-S1 to a wall can be accomplished by using the supplied keyhole brackets on the rear of the cabinet. These two brackets are vertically oriented to attach to a pair of wood screws secured into wood wall studs.

Install the four rubber stick-on bumpers (one on each corner of the rear panel of the speaker) to provide clearance between the wall and the cabinet for speaker wire. This will also prevent the speaker from marring the wall.

Cut out the supplied template at the back of this manual and use it to mark the mounting hole locations on the wall. If the template is not available, space the mounting screws 4<sup>1</sup>/<sub>8</sub>" apart on a vertical line. Check the vertical orientation of the marked hole locations on the wall by aligning them (or the template) with a torpedo level. Be sure to allow at least 1<sup>1</sup>/<sub>16</sub>" of clearance above the top screw to accommodate the 1<sup>1</sup>/<sub>16</sub>" cabinet dimension above this screw and the 1/2" vertical slide needed to hook the bracket on the screw heads.

Use a #10 or #12 (2<sup>1</sup>/<sub>2</sub>-3" long) pan head wood screw to mount into a wood stud. Check the fit of the screw head in the keyhole fitting of the speaker before installing, as screw head sizes do vary. Drill the proper size pilot hole for the screw selected at the marked positions on the wall and install the screws into the wall stud. Leave the back surface of the screw head protruding about 1/4" from the wall surface. This will facilitate hooking the keyhole bracket over the screw head with the rubber feet installed on the back of the cabinet. The clearance between the wall and the screw head may need to be adjusted to achieve a proper fit.

If a stud is not available, use the appropriate type of drywall or masonry anchor to support the weight of the KSB-S1 (six pounds) with a generous safety margin. Please consult your dealer, custom installer or a building contractor in this situation.

In situations that require the speaker not be mounted flat on the wall, but angled, you may use an adjustable wall bracket. Underneath the lower keyhole bracket is a threaded insert that will accept the end of a bracket shaft with a 1/4 x 20 thread. The bracket shaft should fit through the large part of the keyhole bracket opening. This keyhole fitting may be removed if it interferes with the bracket shaft or jam nut. Consult your Klipsch dealer for assistance with the selection of an appropriate bracket. Refer to the bracket manufacturer's mounting and installation instructions for specifics on attaching the bracket to a wall.

**Do not use the keyhole brackets for ceiling mounting!** Consult your dealer, custom installer or contractor for alternate mounting methods.



#### **HOW TO CONNECT THE KSB-S1 SURROUND SPEAKERS**

Switch your electronics OFF when making all connections! To properly use surround channel speakers, your receiver, or signal processor, must have a designated surround channel output. Connect your KSB-S1 to the “Rear” or “Surround” channel output terminals of your system’s power amplifier. When connecting rear channel speakers to a 5.1 channel system (Dolby Digital or DTS), be sure to connect the right and left rear speakers to the appropriate right and left rear channels, as these systems have stereo surround effects.

Be sure to observe proper polarity (+ to + and - to -) and avoid having excess bare wire at the connectors which could short together causing possible amplifier damage. Refer to “About Speaker Wire Connections.”

### **About Speaker Wire Connections**

When making any type of speaker wire connection, be sure to observe proper polarity. Most speaker wire is color-coded or has some distinguishing feature differentiating the two conductors. Speaker wire connectors on most loudspeakers and amplifiers are also color-coded. Typically, **Red** is positive (+) and **Black** is negative (-), or ground. It does not matter which wire conductor is connected to the positive or negative connection of your equipment as long as you are consistent. Be sure that the connections from the amp to the speaker on all of the various channels of your system are connected in a like manner. Be careful not to have excess bare wire or loose strands of wire that could short from positive to negative as this could damage the speaker and amplifier.

If one speaker in a stereo pair is out of phase relative to the other (one speaker has the positive and negative terminals reversed), you will hear no center stereo image and a reduction in the bass. To remedy this, check all the connections to make sure both speakers are connected to the amplifier in the same fashion, with positive to positive and negative to negative. High quality cable can make an audible improvement in the sound of your speakers. Your Klipsch dealer can assist you in selecting the proper cable to ensure optimal performance from your loudspeakers.

# Component Specifications

## KSB 1.1

**Sensitivity:** 92 dB @ 1 watt/1 meter  
**Bandwidth:** 65 Hz-20 kHz±3 dB  
**Nominal Impedance:** 8 ohms  
**Crossover Frequency:** 2800 Hz  
**Power Handling:** 75 watts maximum continuous (300 watts peak)  
**Enclosure Type:** Bass reflex via front-mounted port  
**Drive Components:** Two-way system using one 1" (2.54 cm) K-94-S neodymium magnet compression driver with a 90° x 40° Tractrix Horn and one 5.25" (13.34 cm) K-1027-SV magnetically shielded woofer  
**Weight:** 5 lbs. (2.27 kg)  
**Height:** 11" (28 cm)  
**Width:** 6.75" (17.15 cm)  
**Depth:** 6" (15.24 cm)  
**Finish:** Black or white high-impact polystyrene

## KSB 2.1

**Sensitivity:** 93 dB @ 1 watt/1 meter  
**Bandwidth:** 55 Hz-20 kHz±3 dB  
**Nominal Impedance:** 8 ohms  
**Crossover Frequency:** 2800 Hz  
**Power Handling:** 85 watts maximum continuous (340 watts peak)  
**Enclosure Type:** Bass reflex via front-mounted port  
**Drive Components:** Two-way system using one 1" (2.54 cm) K-94-S neodymium magnet compression driver with a 90° x 40° Tractrix horn and one 6.5" (16.5 cm) K-1041-SV magnetically shielded woofer  
**Weight:** 11 lbs. (5 kg)  
**Height:** 15" (38 cm)  
**Width:** 7.5" (19 cm)  
**Depth:** 8" (20.32 cm)  
**Finish:** Black Ash or Rosewood vinyl veneer

## KSB 3.1

**Sensitivity:** 94 dB @ 1 watt/1 meter  
**Bandwidth:** 45 Hz-20 kHz±3 dB  
**Nominal Impedance:** 8 ohms  
**Crossover Frequency:** 2800 Hz  
**Power Handling:** 100 watts maximum continuous (400 watts peak)  
**Enclosure Type:** Bass reflex via front-mounted port  
**Drive Components:** Two-way system using one 1" (2.54 cm) K-94-S neodymium magnet compression driver with a 90° x 40° Tractrix horn and one 8" (20.32 cm) K-1042-SV magnetically shielded woofer  
**Weight:** 16 lbs. (7.3 kg)  
**Height:** 17" (43.2 cm)  
**Width:** 9.25" (23.5 cm)  
**Depth:** 9.25" (23.5 cm)  
**Finish:** Black Ash or Rosewood vinyl veneer

## KSC-C1

**Sensitivity:** 95 dB @ 1 watt/1 meter  
**Bandwidth:** 70 Hz-20 kHz±3 dB  
**Nominal Impedance:** 8 ohms  
**Crossover Frequency:** 2800 Hz  
**Power Handling:** 100 watts maximum continuous (400 watts peak)  
**Enclosure Type:** Sealed cabinet  
**Drive Components:** Two-way system using one 1" (2.54 cm) K-94-S neodymium magnet compression driver with a 90° x 40° Tractrix Horn and two 5.25" (13.34 cm) K-1033-SV magnetically shielded woofers  
**Weight:** 15 lbs. (6.8 kg)  
**Height:** 6.5" (16.5 cm)  
**Width:** 20" (51 cm)  
**Depth:** 7.125" (18 cm)  
**Finish:** Matte finish black vinyl

## KSB-S1

**Sensitivity:** 95 dB @ 1 watt/1 meter (equivalent sound energy)  
**Bandwidth:** 115 Hz-8 kHz±3 dB  
**Nominal Impedance:** 8 ohms  
**Crossover Frequency:** N/A  
**Power Handling:** 80 watts maximum continuous (320 watts peak)  
**Enclosure Type:** Sealed cabinet  
**Drive Components:** Two 5.25" (13.34 cm) K-1064-S full range drivers  
**Weight:** 6 lbs. (2.7 kg)  
**Height:** 6.75" (17.15 cm)  
**Width:** 11.5" (29.2 cm)  
**Depth:** 6.75" (17.15 cm)  
**Finish:** Matte finish black or white vinyl  
**Mounting:** Threaded insert and double keyhole

## **Klipsch Limited Warranty**

KLIPSCH, L.L.C. ("KLIPSCH") warrants this product to be free from defects in materials and workmanship (subject to the terms set forth below). For a period of five (5) years from the date of purchase, KLIPSCH will repair or replace (at KLIPSCH's option) this product or any defective parts (excluding electronics and amplifiers) in this product. For products that have electronics or amplifiers, the warranty on those parts is for a period of two (2) years from the date of purchase.

To obtain warranty service, please contact the KLIPSCH authorized dealer from which you purchased this product. If your dealer is not equipped to perform the repair of your KLIPSCH product, it can be returned, freight paid, to KLIPSCH for repair. Please call KLIPSCH at 1-800-KLIPSCH for instructions. You will need to ship this product in either its original packaging or packaging affording an equal degree of protection.

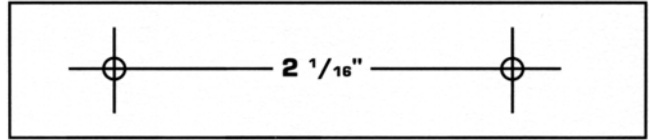
Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented to obtain warranty service.

This Warranty is invalid if (a) the factory applied serial number has been altered or removed from this product or (b) this product was not purchased from a KLIPSCH authorized dealer. You may call 1-800-KLIPSCH to confirm that you have an unaltered serial number and/or you purchased from a KLIPSCH authorized dealer.

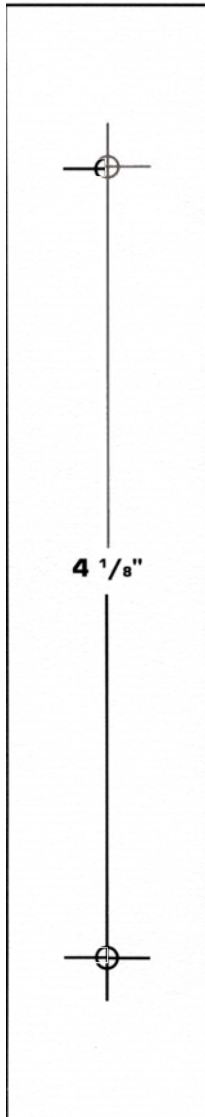
This Warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence, commercial use, or modification of, or to any part of, the product. This Warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than KLIPSCH or a KLIPSCH dealer which is authorized to do KLIPSCH warranty work. Any unauthorized repairs will void this Warranty. This Warranty does not cover products sold AS IS or WITH ALL FAULTS.

**REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER. KLIPSCH SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.**

Some states do not allow the exclusion or limitation of incidental or consequential damages or implied warranties so the above exclusions may not apply to you. This Warranty gives you specific legal rights, and you may have other rights which vary from state to state.



**KSB 1.1 Wall Mount  
Hole Marking Template**



**KSB-S1 Wall Mount Hole Marking Template**

**Cut along dotted line and mail.**

*For multiple speaker purchases, please fill out only one warranty card.*

Name \_\_\_\_\_

Address \_\_\_\_\_

Age \_\_\_\_\_ Marital Status  Single  Married  Divorced

Highest Education Level  High School  College  Graduate School

Did you purchase these speakers for  Music  Home Theater  Both

What kind of music do you like?

Rock  Classical  Jazz  New Age  R&B  Country  Other

Dealer Name \_\_\_\_\_

Dealer Address \_\_\_\_\_

Dealer City/State/Zip \_\_\_\_\_

Date of Purchase \_\_\_\_\_

*Model and serial number must be included to honor your warranty card.*

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Model \_\_\_\_\_ Serial Number \_\_\_\_\_

Other speakers you own Brand \_\_\_\_\_  Bookshelf  Floorstanding  Custom

Other electronics you own (check as many as apply)

TV (screen size in inches) \_\_\_\_\_  Projection TV (screen size in inches) \_\_\_\_\_  AV amplifier

VCR  Laser disc player  CD player  Cassette player  Turntable  Pre-amp  DVD player

Audio amplifier  Audio receiver  Satellite dish  Cable  DSS (Digital Satellite)

Are you purchasing for  New home  Existing home – How long at existing home? \_\_\_\_\_

How did you hear about Klipsch speakers?

Magazine  Dealer advertising  TV  Friend  Dealer recommendation  Builder





**Klipsch**<sup>®</sup><sub>L.L.C.</sub>

A LEGEND IN SOUND.

8900 Keystone Crossing, Suite 1220  
Indianapolis, Indiana 46240  
1-800-KLIPSCH • [www.klipsch.com](http://www.klipsch.com)

For your records:

Model \_\_\_\_\_

Serial Number \_\_\_\_\_

Date Purchased \_\_\_\_\_

Dealer Name \_\_\_\_\_

Make sure you return your warranty card so that we may keep you up-to-date on new Klipsch products and promotions. As always, if you have any questions, contact your local authorized Klipsch dealer.

**Klipsch, L.L.C.**  
P.O. Box 688  
Hope, AR 71802

Place First  
Class Postage  
Stamp Here